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HDP/SB/21 based on PTO/SB/21 (08-00)

2833  
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# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Applicati n Num b r	09/824,505
Filing Dat	April 2, 2001
First Nam d Inventor	Tomoyuki SEKI et al.
Group Art Unit	2833
Examiner Name	Edwin A. Leon
Attorney Docket Number	5077-000027/US

## ENCLOSURES (check all that apply)

- |   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form<br><br><input checked="" type="checkbox"/> Fee Attached<br><br><input checked="" type="checkbox"/> Amendment<br><br><input type="checkbox"/> After Final<br><br><input type="checkbox"/> Affidavits/declaration(s)<br><br><input checked="" type="checkbox"/> Extension of Time Request<br><br><input type="checkbox"/> Express Abandonment Request<br><br><input checked="" type="checkbox"/> Information Disclosure Statement<br><br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><br><input type="checkbox"/> Response to Missing Parts/ Incomplete Application<br><br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Assignment Papers (for an Application)<br><input checked="" type="checkbox"/> Drawing Correction Approval Request w/ 2 sheets of drawings<br><br><input type="checkbox"/> Licensing-related Papers<br><br><input type="checkbox"/> Petition<br><br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><br><input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address<br><br><input type="checkbox"/> Terminal Disclaimer<br><br><input type="checkbox"/> Request for Refund<br><br><input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Group<br><br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><br><input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)<br><br><input type="checkbox"/> Proprietary Information<br><br><input type="checkbox"/> Status Letter<br><br><input type="checkbox"/> Other Enclosure(s) (please identify below): |
|---|---|--|

Remarks

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Harness, Dickey & Pierce, P.L.C.	Attorney Name DONALD J. DALEY	Reg. No. 34,313
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Signature

Date

May 12, 2003

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**FEE TRANSMITTAL  
for FY 2003**

Patent fees are subject to annual revision.

**Complete if Known**

Application Number	09/824,505
Filing Date	April 2, 2001
Inventor(s)	Makoto HORIUCHI et al.
Examiner Name	Edwin A. Leon
Group / Art Unit	2833
Attorney Docket No.	5077-000027/US

**TOTAL AMOUNT OF PAYMENT** (\$) 410.00**METHOD OF PAYMENT (check one)**
☒ The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:
Deposit  
Account  
Number

08-0750

Deposit  
Account  
Name

Harness, Dickey &amp; Pierce, P.L.C.

☒ Charge Any Additional Fee Required  
Under 37 CFR 1.16 and 1.17  
☐ Applicant claims small entity status.  
See 37 CFR 1.27
2. ☒ Payment Enclosed:
☒ Check    ☐ Credit card    ☐ Money Order    ☐ Other
**FEE CALCULATION****1. BASIC FILING FEE**

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
101	750	201	375	Utility filing fee	
106	330	206	165	Design filing fee	
107	520	207	260	Plant filing fee	
108	750	208	375	Reissue filing fee	
114	160	214	80	Provisional filing fee	

**SUBTOTAL (1)**

(\$ 0)

**2. EXTRA CLAIM FEES**

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	** = 0	X	= 0
Multiple Dependent	** = 0	X	= 0

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description
103	18	203	9	Claims in excess of 20
102	84	202	42	Independent claims in excess of 3
104	280	204	140	Multiple dependent claim, if not paid
109	84	209	42	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

**SUBTOTAL (2)**

(\$ 0)

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Fee Code	Large Entity Fee (\$)	Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet.	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	410	216	205	Extension for reply within second month	410
117	930	217	465	Extension for reply within third month	
118	1,450	218	725	Extension for reply within fourth month	
128	1,970	228	985	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,300	241	650	Petition to revive - unintentional	
142	1300	242	650	Utility issue fee (or reissue)	
143	470	243	235	Design issue fee	
144	630	244	315	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17 (q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	750	246	375	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	750	249	375	For each additional invention to be examined (37 CFR § 1.129(b))	
179	750	279	375	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)**

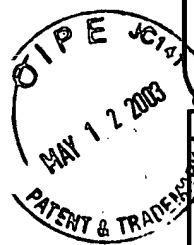
(\$ 410.00)

**SUBMITTED BY****Complete (if applicable)**

Name (Print/Type)	DONALD J. DALEY	Registration No. Attorney/Agent	34,313	Telephone	703-668-8000
Signature				Date	May 12, 2003

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

**Burden Hour Statement:** This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



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**(TRANSLATION)**

**Mailing No. 009290**

**Mailing Date February 14, 2003**

**NOTICE OF FORWARDING COPY OF WRITTEN OPPOSITION**

<b>Patent Opposition Number:</b>	<b>2002-72963 for opposition</b>
<b>(Patent Number):</b>	<b>(3290648 for patent)</b>
<b>Drafted Date:</b>	<b>February 3, 2003</b>
<b>Appeal Examiner-in-chief</b>	
<b>Appeal Examiner of JPO:</b>	<b>Yasuko ETOH</b>
<b>Patentee:</b>	<b>Matsushita Electric Industrial Co., Ltd.</b>
<b>Agent Patent Attorney:</b>	<b>Fumio IWAHASHI (and other 2 persons)</b>

**A copy of a written opposition that an opponen was submitted is forwarded here.**

**No response to the forwarding of the copy of written opposition is necessary. When reasons for revocation of patent is notified separately, an argument or a demand for correction may be submitted within a specified period.**

**If there are any questions in this Notice, please contact to following.**

**To : Department of Appeal Third personnel      Shoji MANAKA**

**TEL: 03-3581-1101 (extension code No. 3650)**

**FAX: 03-3580-8019**

**WRITTEN OPPOSITION**

**December 10, 2002**

**To:**

**Commissioner of Patent Office Shinichiro OHTA**

**1. Indication of Patent Relating to Opposition**

**Patent Number: 3290648 for patent**

**Indication of Claims: Claim 1, Claim 3, Claim 4, Claim 5, Claim 7  
Claim 8, Claim 9 and Claim 10**

**2. Opponent**

**Address: Residence Seiwa 205, 4-22-13 Aoi, Adachi-ku,  
Tokyo, 121-0012**

**Name: Yoshie Yoshimatsu**

### 3. Reasons of Opposition

#### (1) Summary of Reasons of Opposition

##### ① Patent Law Section 29(2) and Section 29bis (Patent Law Section 113(ii))

Claim	Invention of Present Patent	Evidence
1	<p>A. A discharge lamp comprising: a luminous bulb in which a luminous material is enclosed and a pair of electrodes are opposed in the luminous bulb; and a pair of sealing portions for sealing a pair of metal foils electrically connected to the pair of electrodes, respectively, wherein each of the pair of metal foils has an external lead at a side oppose to a side electrically connected to the respective electrodes, respectively,</p> <p>B. at least one of the metal foils is in a corrugated structure in such a fashion that upper faces and lower faces of the metal foils respectively appear at upper and lower end faces of the metal foils when viewing along a longitudinal direction of the metal foils from the luminance bulb side, and the metal foil having the corrugated structure has at least one wave portion in an area between an end of the electrode and an end of the external lead of the metal foil.</p>	<p>Evidence 1 (JP6-163000A)</p> <p>•[Industrial Field of Utilization], [0004] and [0007] in "Prior Art" in the gazette</p> <p>A. A electric lamp, comprising a lamp vessel closed in a vaccumtight manner and having a quartz glass wall; an electronic element; a filling in the lamp vessel; and metal foils embedded in the wall of the lamp vessel and each electrically connected to a respective internal current conductor extending to the electric element and a respective molybdenum external current conductors, wherein the external current conductors issue from the wall to the exterior, each has a contact face at an end portion thereof and a center line substantially coinsides with the contact face, and the corresponding metal foil being welded to the contact face.</p>
3	<p>C. The discharge lamp of Claim 1, wherein at least one crest of the wave portion is arranged in an area nearer the luminous bulb than the center portion of the metal foil in the longitudinal direction of the metal foil (inluding the center portion).</p>	<p>B, C, D, E H, I. The metal foil follows a curved or kinked path because of its partly centered, partly eccentric situation.</p> <p>B, C, D, E, H, I. The metal foil follows a curved or kinked path at the external current conductor .</p> <p>(Effects)</p> <p>The lamp can be provided which can be readily manufactured and in which the risk of damage to the metal foil is counteracted.</p>

4	D. The discharge lamp of Claim 1, wherein a plurality of crests are arranged in the area of the wave portion between an end of the electrode and an end of the external lead of the metal foil.	Evidence 2 (Section 29bis) (JP2001-23565A) · [Claim 1], [0006] in [Problems that the Invention is to Solve] and Figs. 5 and 6 in the gazette
5	E. A discharge lamp, comprising a luminous bulb in which a luminous material is enclosed and a pair of electrodes are opposed in the luminous bulb; and a pair of sealing portion for sealing a pair of metal foils electrically connected to the respective electrodes, respectively, wherein any of the metal foils has a structure having a twisted portion on the luminous bulb side, and has a corrugated structure in such a fashion that upper faces and lower faces of the metal foils respectively appear at upper and lower end faces of the metal foils when viewing along a longitudinal direction of the metal foils from the luminous bulb side.	A. A discharge lamp having a pair of electrodes within a light-emitting tube and a sealing portion in which a metallic foil bonded to each of the electrodes are air-tightly sealed, wherein the metallic foil has a crease running in its lengthwise direction and the metallic foil is bonded to each of the electrodes.  B, C, D, E, H, I. In lamps of this sort, the metallic foil 10 is thin, and thus, easily bent in directions crosswise to the length of the metallic foil 10, and it sometimes happens when the mount is inserted in the bulb proper 3 and positioned that, as seen in FIG. 5 (which is a view from the direction in parallel with the metallic foil 10), the metallic foil 10 will be bent away from the center line X of the light-emitting tube, so that the electrodes 2 are shrink sealed away from the center line X as shown in Fig. 6 (which is a view from the direction in parallel with the metallic foil 10) .  B, C, D, E, H, I. Figs. 5 and 6.  (Effects) This gazette indicates that the metallic foil is naturally bent in an ordinary manufacture method.

7	<p>F. A discharge lamp in which 150 to 200 mg/cm<sup>3</sup> mercury is filled, comprising: a luminous bulb in which a luminous material is enclosed and a pair of electrodes are opposed in the luminous bulb; and a pair of sealing portions in shrink-sealing structure for sealing a pair of metal foils electrically connected to the pair of electrodes, respectively, wherein a first direction perpendicular to a thickness direction of the metal foil at the luminous bulb side end of one of the metal foils is different from a second direction perpendicular to a thickness direction of the metal foil at the luminous bulb side end of the other metal foils.</p>	<p>Evidence 3 (JP10-255720A)</p> <p>The stress generated due to the presence of the difference in the expansion rate can be dispersed, and the glass can be prevented from clacking. Further, with the increase in sealed area of the glass and the metal foil, the sealability is enhanced with respect to the enclosed gas liable to leak through the metal foil and the electrodes from the light emitting portion.</p>
8	<p>G. The discharge lamp of Claim 7, wherein the first direction is displaced from the second direction in a range between 25 degree and 90 degree, both inclusive.</p>	<p>Evidence 4 (JP7-153436A)</p> <p>[Claim 5], [0008] in [Summary of the Invention] and [0021] in [Detailed Description] in the gazette</p> <p>A. A lamp having a lamp envelope and at least one end region in which the lamp is sealed by shrink or press sealing.</p>
9	<p>H. The discharge lamp of Claim 7, wherein at least one of the metal foils has a twisted structure at a portion on the luminous bulb side of the metal foil.</p>	<p>B, C, D, E, H, I. The lamp inlead assembly in claim 1, wherein at least one of the plurality of trough sections includes outer, straight trough sections and an inner, curved trough section, the outer straight trough sections being formed at approximately the midpoint along the width of the foil member and having the inner and outer lead wire members disposed therein.</p>
10	<p>I. The discharge lamp of Claim 7, wherein at least one of the metal foils has a corrugated structure in a longitudinal direction of the metal foil.</p>	

		<p>B, C, D, E, H, I. Although the above described embodiment of the invention constitutes the preferred embodiment, it should be understood that modifications can be made thereto without departing from the scope of the invention as set forth in the appended claims. For instance, instead of the oval shaped inner trough portion 46 shown in Fig. 6, it would be possible to utilize an S-shaped inner trough portion or some other shape that resulted in increased rigidity of the foil member, and still practice the principles of the present invention. Additionally, although the trough sections of the present invention are shown having an arcuate or rounded shape with an essentially uniform radius and pitch characteristics as well as having a symmetrical waveshape associated therewith, it is not intended that this invention be limited to such a configuration. It is possible to modify the pitch and radii of the trough sections and/or to utilize a non-symmetrical waveshape and still practice the present invention.</p> <p>(Effects)</p> <p>Effective sealing process is realized without involving damage to the thin metal foil of the inlead assembly.</p>
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		<p>Evidence 5 (JP5-217555A)</p> <ul style="list-style-type: none"> <li>• Claim 1 and Fig. 1.</li> </ul> <p>A, F, G. A metal halide lamp having a light emitting tube in which a sealing portion is connected at each end of a discharge space portion in which a pair of electrodes are provided and an outer lead is lead outside from the sealing portion, characterized in that the sealing face of the sealing portion stands perpendicularly.</p> <p>(Effects)</p> <p>The boundary portion of the discharge space and the sealing portion of the light emitting tube is prevented from being folded even application of vibratoion and the like to the lamp.</p> <p>Evidence 6 (Section 29bis) (JP2000-173543A)</p> <p>H. Fig. 5</p> <p>(Effects)</p> <p>Twisting of the metal foil results in increased contact area of the metal foil and the sealed portion of the straight tube portion per length, thereby increasing the sealability.</p>
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**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 09/824,505  
Filing Date: April 2, 2001  
Applicant: Makoto HORIUCHI et al.  
Group Art Unit: 2833  
Conf. No.: 3633  
Examiner: Edwin A. Leon  
Title: DISCHARGE LAMP, METHOD FOR PRODUCING THE  
SAME AND LAMP UNIT  
Attorney Docket: 5077-000027/US

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**DRAWING CORRECTION APPROVAL REQUEST**

Honorable Commissioner for Patents  
Alexandria, VA 22313-1450

May 12, 2003

Dear Sir:

Applicants respectfully request the Examiner's approval of the following drawing corrections indicated in red ink on the attached sheets. The following are the corrections.

Figs.21A-22B, please add the label "PRIOR ART"

No new matter has been entered via the drawing correction. Corrected formal drawings will be prepared in accordance with the Notice of Draftperson's Patent Drawing Review Form PTO-948 and will be filed upon approval by the Examiner and subsequent indication of allowance of the present application.

If there are any outstanding matters remaining in this application, the Examiner is invited to contact Donald J. Daley, Reg. No. 34,313 at the number listed below in the Washington, D.C. area in order to discuss these matters.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. **08-0750** for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C

By:   
Donald J. Daley, Reg. No. 34,313

P.O. Box 8910  
Reston, Virginia 20195  
(703) 668-8000

DJD:ewd

Attachment: Two (2) sheets of red-inked drawings



19/20

**PRIOR ART**

FIG. 21A

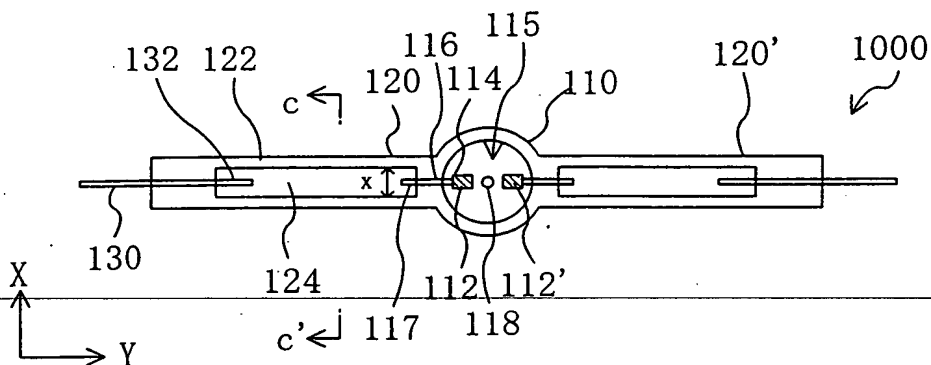
**PRIOR ART**

FIG. 21B

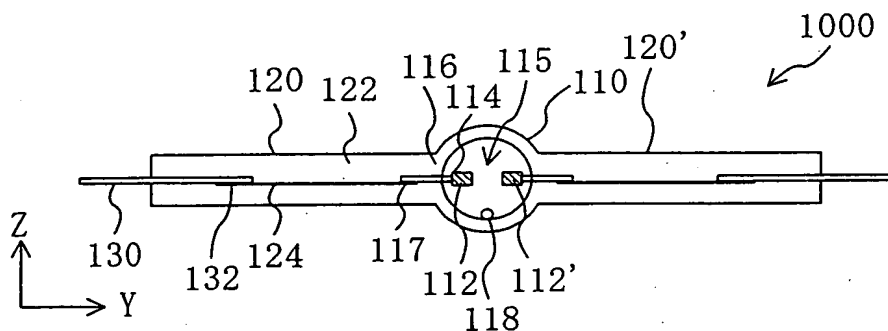
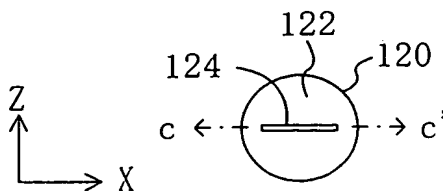
**PRIOR ART**

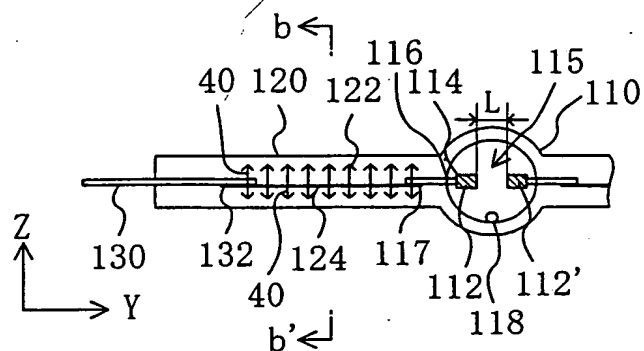
FIG. 21C



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PRIOR ART

FIG. 22A



PRIOR ART

FIG. 22B

